

PROJECT ANALYSIS INFORMATION SHEET

DORAVILLE TO NORCROSS HEAVY RAIL LINE



DESCRIPTION

All day heavy rail serving Doaville, Peachtree Corners, and Norcross. This is a heavy rail line along the I-85 corridor.

Length: 4.3 Miles

Technology: Heavy Rail (HRT)

Service Hours & Frequency: All day, 10-minute peak frequency, 15-minute off-peak

Regional Transfer Stations:
Norcross

Intersecting Projects:
Cumberland / Gwinnett Arena High Capacity Regional Rail Line
Gainesville Commuter Rail
Buford Highway Arterial BRT
Regional Suburban Bus to Cumming, Canton/Waleska, Acworth

Major Employment Markets Served:
Directly connects employment centers:
Peachtree Corners 73,000

Major Activity Centers Transfers to Reach:

Activity Center	Transfers
Downtown	0
Midtown	0
Buckhead	0
Perimeter Center	1
Cumberland	1
North Point	1
Town Center	1
Airport	0
Peachtree Corners	0
Gwinnett Place	1
Southlake	1
Fulton Industrial Boulevard	1
Emory	1

Parallel Roadway Corridors:

- I-85 Northeast
- Peachtree Industrial Boulevard
- Buford Highway

ARC Livable Centers Initiative Areas Served

- Norcross
- Doraville

COSTS

Order of Magnitude Capital Cost: \$925 millionⁱⁱ, Annualized = \$32 millionⁱⁱⁱ

2030 Estimated Annual Operating Cost: \$3.5 million

BENEFITS

Year 2030 Range of Estimated Daily Boardings of this segment within Concept 3 transit system^{iv}:
9,600 – 20,400

Potential Daily VMT Reduction (miles)
76,000 – 163,000

Summary Table of Estimated Value of Primary Benefits^v

Primary Benefit Factor	Estimated Low Value of Benefits (\$ millions)	Estimated High Value of Benefits (\$ millions)
Congestion	\$3.9	\$8.3
Safety ^{vi}	\$1.2	\$2.5
Economic Impact	\$64	\$137
Consumer Fuel Savings	\$3.8	\$8.2
Total	\$73	\$156

Note: Primary benefits reflect the traditional measures of the positive impacts of a transit investment. In contrast to the comprehensive cost estimate, these measures do not provide a complete illustration of all positive efficiency and equity impacts. The estimated primary benefit/cost ratio represents a conservative indication of the project's cost-effectiveness.

Due to data and resource limitations, this primary benefit/cost analysis reflects a simplified approach to the standard major investment analysis prescribed by the Federal Transit Administration to qualify for major federal capital investment.^{vii} While this analysis provides some insight when applied to this project individually, the measures calculated for Concept 3 in its entirety are more reliable given the systemwide nature of the modeling methodology.

Estimated Primary Benefit / Cost Ratio

Estimated Annual Primary Benefits (\$ millions)	\$73-\$156
Total Est. Annualized Cost (\$ millions)	\$36
Ratio of Annual Primary Benefits / Annualized Cost	2.06 – 4.38
Annualized Cost / Boarding	\$1.24 - \$0.58

Secondary Benefits

Secondary benefits are additional measures that still reflect a significant and quantifiable positive impact on the transportation system and its users. Taken together with the primary measures, these reflect a more comprehensive picture of the complete benefit of the project. These areas represent opportunities for more quantifiable impact as research and the state of the practice develop. Among these secondary benefits not quantified for this analysis are:

- Health
- Energy Conservation
- Emissions Reductions
- Parking Cost
- Third-Party Drive time (i.e. chauffeuring savings)

Project Specific Issues / Characteristics

This extension takes advantage of the existing Heavy Rail bridge over I-285 north of the Doraville Station. This is the route of the original referendum in 1972 and the failed 1990 referendum for extending MARTA rail into Gwinnett County. This project also probably does not require the construction of a new maintenance facility. Finally, the project also presents an opportunity to provide for a coordinated transfer center in Norcross that with commuter rail, light rail, local and regional suburban buses that is not as constrained as at the Doraville Station.

ⁱ 2030 Estimates from Envision6 Atlanta Regional Commission Model

ⁱⁱ Order of Magnitude Capital Costs for Peer Commuter Rail are highly variable and dependent on negotiation with railroads.

All day service is currently estimated at \$25 million / mile to accommodate both passenger and freight rail improvement

ⁱⁱⁱ Annualized over a 30 year time frame with a 4.0% interest rate

^{iv} Assumes Entire 2030 Concept 3 network and the allowed shift in population and employment in the ARC model with the lower range representing no shift in pop / emp from the adopted E6 model and the upper range representing a 20% shift in pop / emp

^v Values are in \$2007

^{vi} Injuries crash benefits only.

^{vii} TPB Staff Report, *Impacts of Regional Transit Infrastructure Investment on Metropolitan Atlanta*, July 2008